II. REMARKS

IN RESPONSE TO EXAMINER'S COMMENTS / OFFICE ACTION

INFORMATION DISCLOSURE STATEMENT

Applicants acknowledge the examiner's comment, with the understanding that no further action is required.

ELECTION / RESTRICTIONS

It is the applicants' understanding, based on the examiner's previous correspondence dated September 22, 2004 relative to election of species (page 2, paragraph 5), that Claims 4-11, 14, 15 and 18-20 (all of which are dependent on generic Claims 1, 16, and 17 as per page 2, paragraph 3) may be considered once a generic claim is allowed. Therefore applicant considers the withdrawal of these claims to be provisional until such generic claims are allowed.

DRAWINGS

Corrected drawing sheet # 3 /5 indicating reference number 24 is attached as per the examiners request.

CLAIM REJECTIONS - 35 USC article 112, paragraph 2

Applicants recognize the examiner's objection relative to clarity of Claims 1, 3, 12, 13, and 17, and have revised the claims accordingly to clearly point out applicants' intention to claim the subcombination of "a portable device" by correcting the antecedent reference of Claim 1 and by reciting references to the "extant horizontal structure/shelf" only in regard to the function of the portable device. Applicants have also revised Claim 2 on the same basis.

÷ .

CLAIM REJECTIONS - 35 USC article 102

Applicants respectfully traverse the examiner's rejection of Claims 1, 3, 12, and 17 as being anticipated by Burkhalter US 3,074,745.

The present invention teaches a portable device which supports a load in a *cantilevered disposition* relative to an extant *horizontal* structure by effectively counteracting the cantilevered load with a moment couple acting *vertically* at offset locations on the top and bottom surfaces of the structure. As seen in Figs. 1-4A, in particular sectional views 1A, 3A and 4A, the load 12 is supported on platform 01 in a position extending horizontally beyond the edge 09 of the generally horizontal structure, and it is supported by surface 07 of bracket 03 acting downwardly on top surface 10 and end 06 of bracing portion 02 acting upwardly on bottom surface 11 (Specifications page 7, paragraph 2, lines 6-10; page 8, paragraph 2, lines 8-11).

In distinct contrast, Burkhalter teaches a portable device which effectively supports a load in several positions, generally in a position *above* an extant structure, and which appears to include five configurations, Figs. 1-5.

Fig. 1 illustrates the device configured so as to hang from the top of a steering wheel and to be otherwise supported by horn rim 10a. The load does not appear to be supported in a cantilevered disposition relative to the steering wheel.

Fig. 2 illustrates the device configured so as to sit on a generally horizontal surface ("beach, bench, seat") supported by bracket 18 and by an edge of platform 12. In this instance, it could be said that the load (book) is supported in a partially cantilevered disposition relative to the generally horizontal surface in that it appears to be supported by, and extend beyond, bracket 15 offset from desk 12c by bracket portion 17a. However, as can be clearly distinguished from the present invention, the device simply rests on a generally horizontal surface. It is not supported in a cantilevered disposition (so as to extend beyond the structure's edge as in applicants' Figs. 1-4) relative to a structure with an edge, top surface,

OFFICE ACTION RESPONSE 3/11/05 Application Control Number 10/654,408 FOLDING CANTILEVER SUPPORT AND METHOD by L. A. Duffy & R. B. Duffy pg.8 of 17

and bottom surface by a hanging bracket and bracing portion as is the present invention.

Fig. 3 illustrates the device also supported on a horizontal surface by member 17a and platform 12 with the load (book) in a similar cantilevered disposition only relative to the general horizontal surface, as distinguished from the present invention as above.

Fig. 4 illustrates the device hanging from a steering wheel in a disposition similar to Fig.1, supported by the wheel and horn rim. Although, depending on the location of horn rim 10a relative to bracket 17, Fig. 4 may also appear to support a load, on desk 12, in a cantilevered disposition relative to the steering wheel (presumably with the horn energized), the relationship is distinctly different than that of the present invention. The structure, a steering wheel, is sloped rather than being generally horizontal and does not have an edge, top and bottom as seen in applicant's device. In such a disposition, the device would appear to be supported by a generally horizontal moment couple acting on the rear of sloped steering wheel 10 and front of horn rim 10a; not by a generally vertical moment couple acting on the top and bottom surfaces of an extant horizontal structure as in the present invention. Though it might be assumed that such a device could also support a load in a cantilevered position with respect to an extant horizontal structure, if the structure (steering wheel) is thus placed in a generally horizontal position, it can be seen that the cantilevered load would be supported in an awkward position above such structure, rather than extending beyond the edge of the structure as does the present invention.

Fig. 5 illustrates the device configured so as to hang one end from the bottom of a steering wheel 10 by bracket 15, with the opposite end of platform 12 presumably supported by the user's lap. The load does not appear to be supported or supportable in a cantilevered disposition.

As seen in his drawings and specifications, Burckhalter's device does not appear to include any means for supporting a load in a cantilevered disposition in relation to an extant horizontal structure as does the present invention, i.e. extending beyond the edge of the structure as seen in applicant's Figs. 1-4, and particularly in sectional views Figs. 1A, 3A, and 4A.

With regard to Claims 1 and 17 (presently amended): the applicant's invention supports a load in a "cantilevered disposition relative to a generally horizontal extant structure" (Claim 1), which structure may be a "shelf" (Claim 17). Effectively, the cantilevered load is supported by resisting a moment couple with *vertical* reactions acting at offset locations: bracket 07 acting on the top 10, and brace end 06 acting on the bottom 11 of the structure 08 (specification page 7, paragraph 2, lines 6-10; page 8, paragraph 2, lines 8-11).

In comparison, Burkhalter's device, in the one instance in which it might be said to appear to support a cantilevered load from an extant structure (Fig. 4), would do so by effectively resisting the resultant moment couple with reactions effectively acting horizontally against the back of the steering wheel and on the front of the horn rim. Therefore, there does not appear to be any configuration of Burkhalter's device which is comparable in either form or function to the present invention as Claimed in 1 or 17 (presently amended).

With regard to Claim 3 (presently amended): The present invention may be used to support a load in a sloped disposition effectively beyond the edge of a fixed horizontal structure as in Figs. 1-1A. Although Burckhalter's device may appear to extend in a generally sloped disposition (Figs. 1 and 4) relative to an extant structure, the structure and means of supporting the device in such a position differs significantly from the present invention as explained above. Furthermore, Burckhalter's "extant structure" is a sloped steering wheel in lieu of a generally horizontal structure ("shelf") as in the present invention. Even if the steering wheel were reconfigured into a generally horizontal

position, his device would not resemble the present invention, nor serve any apparent useful function.

With regard to Claim 12 (presently amended): The present invention optionally includes a lateral restraining member, rail 13, which in Figs. 1-1A prevents a load 12 from sliding off of the sloped platform 01. Although Burckhalter's device may be said to include a lateral restraining member (hook 18a in Figs. 1, 2, and 3; rubber band in Figs. 4 and 5), such member is distinct in both function and form from that of the applicant's "rail 13" (specification page 10, paragraph 2, line 2). In the one configuration in which the device might be said to cantilever from a structure (Fig. 4), the only lateral restraining member provided is a rubber band: clearly distinct from the present invention and not adequate for holding a book or other significant load (as per pg. 10/pp2/ln2 above). Furthermore, Burckhalter's device does not include the other aspects of Claim 1 as explained above.

With regard to Claim 17 (presently amended): Applicant's Claim 17 clearly refers to a device that extends in a "cantilevered disposition" from an "extant horizontal shelf" in lieu of Burckhalter's sloped "steering wheel", as discussed above and seen in Figs. 1-4A. Furthermore, the present invention includes a "horizontal bearing segment (07) placed on a top surface of said shelf adjacent to said edge" and a "bracing portion (02)...engaged with a bottom surface of said shelf remote from said edge", whereas Burckhalter's device in Fig. 4 appears to be supported by bracket ends 18, and 17 effectively acting horizontally on horn rim 10A. Other distinctions include those explained above.

Therefore, the present invention is clearly distinguished from that of Bruckhalter in both its form and function and can not be anticipated from his device.

Applicants also respectfully traverse the examiner's rejection of Claim 16 as being anticipated by US Patent 1,878,864 to Lane, et al.

As seen in Figs. 1-4A, the present invention is effectively self-supporting from a horizontal structure with a singular, "an", edge (such as a shelf against a wall). It does

not depend on a clamping mechanism (specification page 6, paragraph 4, line 7; page 8, paragraph 2; Fig. 1A), and in the embodiment of Figs. 1-1A, it can accommodate a wide range of application conditions without adjustment.

In contrast, Lane teaches a method applicable for supporting a cantilevered load only from a horizontal structure ("counter, table") having at least *two* distinct edges 12 and 13, which effectively depends on a clamping mechanism (pg.2, lines 23-48), and which does not appear to be readily adaptable to differential conditions such as variable edge thickness. Lane's method includes extending "strap assembly 22" beyond the *second* edge13 of the structure so as to attach "bent portion 23" around the edge so as to engage horizontally with that edge; then hinging "tray 14" around the near *first* edge 12, so as to clamp the assembly into place. It should be noted that the device must be specifically adjusted with the mechanism of Fig. 6 in order to accommodate differing application conditions.

As distinguished above with regard to Burckhalter, the method of the present invention effectively supports its "load in a cantilevered disposition from an extant horizontal structure" by resisting the moment couple resulting from the cantilever with a set of offset vertical reactions acting on the top 10 and bottom 11 surfaces of the structure 08 (specification page 7, paragraph 2, lines 6-10). In distinct contrast, the method attributed to Lane effectively resists the moment couple resulting from its cantilevered load with a set of horizontal forces acting at two remote edges of the structure: edge 13 on surface 23; and edge 12 effectively at the lower corner of surface 24. Although Lane describes his "flange 25 engaged with the under side of the edge 12" as contributing to "firmly securing the tray" (pg.2, lines 31-34), a simple structural analysis of the assembly would indicate that such contribution is only attributable to the "clamping action effected by the channel" (pg. 2, starting line 35) and that because of the relative location of hinge 21, a load acting downwardly on tray 15 would be primarily resisted only by hook 23 and lower edge of angle 24, and only partially by channel 25 in an instance where the counter and channel dimensions were close to or equal. It can be readily envisioned that even without "flange" 25, a cantilevered load on tray 15 would be effectively supported at

edges 12 and 13 as discussed above. The effective functions of "flange" 25 would appear to be to stabilize the assembly against lateral tilting and to prevent uplift. It should be also noted that distal end 23 of "hanging bracket" 22 effectively engages with far edge13, not with top surface 11 as implied in the OA (pg.6, line 3).

Therefore it can be seen that the present method clearly supports a cantilevered load with a portable mechanism by effectively acting on the top and bottom of a structure with a singular edge, without dependence on precise dimensioning or clamping mechanisms. Lane's method (pg. 2, lines 35-48) of support, however, is effectively a semi-permanent clamping mechanism requiring relatively precise dimensional tolerances and limitations in function. Thus the method and function of the present invention is clearly distinct from that taught by Lane and can not be anticipated from his invention.

CLAIM REJECTIONS - 35 USC article 103

Applicants respectfully traverse the Office Action with regard to the rejection of Claim 13 (presently amended) as being unpatentable over Burckhalter in view of Bellah US 6,045,159 on the following basis:

Claim 13 (presently amended) teaches a device with all of the limitations of Claim 1, which also includes "at least one flexible linear element attached...at only one end for the purpose of separating pages...".

The References are individually complete and combination is not suggested or implied

Burckhalter teaches a "Portable Desk" for attaching to a steering wheel and other functions. Where used to hold and open book Figs. 1-3, pages of the book are retained by rigid "hook portion 18a", and therefore appear to be unchangeable except by temporarily removing the book at least partially from the hook portion. Therefore a page holder as in Bellah would appear to be redundant and unnecessary. On the other hand, Bellah teaches a "Book Holder" for holding a book in an open position which includes a flexible page

holder attached at one end. The device is not intended for attachment to another structure and appears to be complete in itself. While Bellah's device might be improved by combining it with a hanging frame, there is no suggestion or implication that adding a flexible linear element would usefully improve Burckhalter, in that a single page is fixedly maintained and the book must still be moved in order to change pages.

Even if combined the references would not match the function of the present invention.

As seen in Fig. 1, the present invention can be used to support an open book at a convenient angle and location, cantilevered from a shelf or other generally horizontal structure (specification pages 7-10). In this embodiment it is intended to allow a user to mark and refer to multiple pages without removal of the book, as is useful with a cookbook or reference volume. While optional "hold down bracket 15" is provided to keep current pages open, it is designed to pivot out of the way on axis 14 so as to allow pages to be turned without moving the book – in direct contrast to both the rigid bracket of Burckhalter (18a) and Bellah's strap (18).

If Combined, the References don't include the benefits and limitations of Claim 1

As discussed above, the present invention differs significantly from Burckhalter both in its form and function. In that Claim 13 includes the limitations of Claim 1 (presently amended) the present invention performs the unique function of supporting a load (such as an open book) from an extant horizontal structure in a cantilevered disposition as seen in Fig. 1A. No apparent combination of the references can fulfill that significant function.

The Present Invention Solves a Different Problem than either Reference.

Whereas Burckhalter presents a portable desk for use in a car or on a flat surface, and Bellah presents a portable book holder apparently intended to be held in the users hands, the present invention provides a device for supporting a load, including a book, in a **OFFICE ACTION RESPONSE**3/11/05
Application Control Number 10/654,408
FOLDING CANTILEVER SUPPORT AND METHOD by L. A. Duffy & R. B. Duffy pg. 14 of 17

cantilevered disposition relative to a horizontal structure. No combination of the references can be envisioned which would fulfill such a function.

Other Prior Art more closely related to the Present Invention fails to include the feature of Claim 13.

Although applicants' disclosures, as well as citations by the examiner, include numerous easel like and suspended book holders, similar in certain functions to the present invention (i.e. Weight US 2,254,832; O'brien US 4,033,652; Harms US 4,269,381; Krauss US 4,369,948; Lawson US 752,234; Ando US 4,460,145; Spangler US 4,184,725; Kent US 2,325,324; Webb US 6,453,634 B1; Cress US 6,619,609; etc.) none of these references include a flexible page separator "book mark" attached at one end as does the present invention. Although flexible page holders appear to be included in at least several examples of prior art (i.e. Newhouse, US 5.829,787 and Bloom, US #,981,522), those inventions do not also include the utility and limitations of the presently referenced Claim 1.

The present invention has achieved significant commercial and critical success at least in part because of its unique combination of features.

The present invention essentially as seen in Fig. 1 has been marketed on a limited scale as a cookbook holder. Feedback from satisfied customers frequently cites the unique combination of features including the page holding ribbon. The product was awarded "Best New Product" at the 2003 New England Product Trade Show, also because of this unique combination of features.

The Present Invention provides an unappreciated advantage with superior results and a solution to a need unforeseen by Prior Art.

As noted in the objects and advantages of the invention (starting page 3, paragraph 3), the invention is intended to include a number of optional useful features in combination with the unique cantilever device and method so as to result in a utilitarian value surpassing the sum of the parts. Although as noted in the OA, a combination of prior art features could be conceived, the result as suggested would still not achieve the combined utility of the present invention which is distinguished not only by its unique means of support but also by the unique combination of features including the optional retaining rail 13, holding device 15, and the page saving mechanism of Claim 13. Although Burckhalter may disclose a hanging support device and Bellah may disclose a page holding mechanism, any conceivable combination of their features is not equivalent to the present invention.

In conclusion: although as the examiner states that it may "...have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the device in Burckhalter to have included the flexible linear element as taught by Bellah...", the result of such a combination would be significantly different than, and functionally inferior to, the present invention and would not include the combination of utilitarian features contained therein, for at least the reasons enumerated above.

BRIEF SUMMARY OF OTHER PRIOR ART CITED IN THE OFFICE ACTION

US Patent 2,346,703 to Rauen et al discloses an easel-like "Rack" apparently for displaying information while seated on a surface; does not include means for cantilevering a load.

US Patent 2,771,332 to McGinley discloses a detachable cantilevered "Tray" for automobiles held in position by an offset *horizontal* moment couple.

US Patent 2,798,780 to Motorney also discloses a cantilevered "Tray" for automobiles held in position by an offset *horizontal* moment couple.

US Patent 2,814,154 to Krueger discloses a "Removable file support" also held in position by an offset *horizontal* moment couple.

US Patent 3,662,982 to Antonius discloses another car "Tray" held in position by an offset *horizontal* moment couple

US Patent 4,239,170 to Planebo discloses a hanging writing board held in position by a vertically acting hook and a *horizontal* reaction.

US Patent 5,829,787 to Newhouse, Jr. discloses a portable book support with page holders which does not appear to include any means of support.

US Patent 6,038,983 to Lendl discloses an automotive "table" for attaching to a steering wheel.

US Patent 6,435,634 to Webb et al discloses a folding "Document display shelf" permanently attached to the bottom of a horizontal structure.

US Patent 6,619,609 to Cress discloses a cantilevered "Supporting" apparatus permanently attached to the bottom side of a horizontal structure

NEWLY DISCOVERED REFERENCES

Applicants note two recently discovered additional references.

- US 3,981,522 Bloom discloses an easel-like portable Book Holder which also appears to include flexible page holders. The reference is distinct from the present invention at least in that it is not cantilevered from a horizontal structure by the present means.
- 2. The attached photocopy, Exhibit R1, of unknown origin or date, appears to depict a Book Holder which is effectively mounted to the bottom of a shelf with some

type of permanent clamping device. Applicants understand the Japanese title to translate as "reversible". The reference is distinct from the present invention at least in that it appears to include an effectively permanent clamping device and a swivel connection.

CONCLUSIONS

As per the above amendments and response, applicants submit that the application is now complete and that the claims all define patentable distinct matter over the prior art. Therefore they submit that this application is now in condition for allowance, which action is respectfully requested.

CONDITIONAL REQUEST FOR CONSTRUCTIVE ASSISTANCE

Applicants have amended the claims of this application so that they are proper, definite, and define novel aspects which are also unobvious. If for any reason the application is not believed to be in full condition for allowance, applicants respectfully request the constructive assistance and suggestions of the Examiner in accordance with M.P.E.P. 2173.02 and 707.07(j) in order that the application may be placed in allowable condition as soon as possible without the need for further proceedings.

Respectfully Submitted,

Leonard A Duffy

R. Brennan Duffy

Applicants Pro Se

P.O. Box 99

Hinesburg, Vermont 05461

Phone 802 482 3040

Fax 802 482 3490

Attachments: Revised Drawing Sheet 2; Found reference, Exhibit R1; Postcard

Mailed by US Express Mail #

by:

date:

BEST AVAILABLE COPY

Exhibit R-1

